CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-9, 30-47 and 55-59.
- After this Amendment: Claims 1-9, 30-47 and 55-59.

Non-Elected, Canceled, or Withdrawn claims: None

Amended claims: None

New claims: None

Claims:

1. (Previously Presented) A method comprising:

splitting a scene into one or more coherent layers, wherein:

each coherent layer of the scene has a corresponding plane equation to represent a local geometry of that coherent layer; and

the one or more coherent layers in combination represent a single plane of the scene;

propagating boundaries of the coherent layers across a plurality of frames corresponding to the scene; and

refining the splitting to present a virtual view of the scene.

2. (Original) A method as recited in claim 1, wherein the virtual view of the scene is substantially free from aliasing.

3. (Original) A method as recited in claim 1, wherein each of the coherent layers has a corresponding background layer.

4. (Original) A method as recited in claim 1, wherein the plurality of frames correspond to different images of the scene.

5. (Original) A method as recited in claim 1, wherein the refining is initiated by a user.

6. (Original) A method as recited in claim 1, wherein each layer of the scene has a corresponding plane equation to represent a local geometry of that layer.

7. (Original) A method as recited in claim 1, further comprising

rendering the coherent layers with a corresponding background layer to present the virtual view of the scene.

8. (Original) A method as recited in claim 1, further comprising

rendering the coherent layers with a corresponding background layer to present the virtual view of the scene, wherein the background layer is provided by combining a plurality of under-segmented regions.

9. (Previously Presented) One or more computer-storage media comprising computer executable instructions that, when executed, perform the method as recited in claim 1.

10. (Withdrawn) A method comprising:

segmenting a light field into one or more coherent layers;

propagating boundaries of the coherent layers across a plurality of frames corresponding to the light field;

providing a background layer for the coherent layers; and

rendering the coherent layers with the background layer to provide a pop-up light field.

11. (Withdrawn) A method as recited in claim 10, further comprising refining the coherent layers.

12. (Withdrawn) A method as recited in claim 10, further comprising determining uncertain regions between the coherent layers and the background layer.

13. (Withdrawn) A method as recited in claim 10, further comprising applying alpha matting to the coherent layers.

14. (Withdrawn) A method as recited in claim 10, wherein the background layer is provided by combining a plurality of under-segmented regions.

15. (Withdrawn) A method as recited in claim 10, wherein each of the coherent layers have a background layer.

16. (Withdrawn) A method as recited in claim 10, further comprising applying a coherent feathering function to the coherent layer boundaries.

17. (Withdrawn) A method as recited in claim 10, wherein a plurality of polygons represent the coherent layer boundaries.

18. (Withdrawn) A method as recited in claim 10, wherein the rendering utilizes texture-mapped triangles.

19. (Withdrawn) A method as recited in claim 10, wherein the rendering sequentially combines the coherent layers and the background by alpha blending.

20. (Withdrawn) A method as recited in claim 10, wherein the plurality of frames correspond to different images of the light field.

21. (Withdrawn) A method as recited in claim 10, wherein the pop-up light field is substantially free from aliasing.

22. (Withdrawn) One or more computer-readable media storing computer executable instructions that, when executed, perform the method as recited in claim 10.

23. (Withdrawn) A method comprising:

determining a plurality of texture-mapped triangles for each layer of a scene;

binding a plurality of textures to each of the plurality of triangles;

assigning a blending ratio to each vertex of the plurality of triangles; and blending the textures of each of the plurality of triangles to present a virtual view of the scene.

24. (Withdrawn) A method as recited in claim 23, wherein at least three textures are bound to each of the plurality of triangles.

25. (Withdrawn) A method as recited in claim 23, wherein the blending ratio is assigned as a primary color on each vertex.

26. (Withdrawn) A method as recited in claim 23, wherein the blending ratio is assigned as a primary color on each vertex and the primary color is interpolated on each of the plurality of triangles.

27. (Withdrawn) A method as recited in claim 23, wherein the virtual view of the scene is substantially free from aliasing.

28. (Withdrawn) A method as recited in claim 23, wherein the blending utilizes a blending equation.

29. (Withdrawn) A method as recited in claim 23, wherein the blending utilizes a blending equation stored in a pixel shader of a graphics hardware device.

30. (Previously Presented) A user interface comprising:

a layer pop-up module to allow a user to define one or more coherent layers corresponding to a scene;

a refinement module to refine the coherent layers in real time; and

a rendering module to render the coherent layers to present a virtual view of the scene.

31. (Original) A user interface as recited in claim 30, wherein a plurality of polygons represent boundaries of the coherent layers.

32. (Original) A user interface as recited in claim 30, wherein the virtual view of the scene is substantially free from aliasing.

33. (Original) A user interface as recited in claim 30, further comprising a background construction module to provide a background layer corresponding to the coherent layers.

34. (Original) A user interface as recited in claim 30, further comprising a background construction module to provide a background layer corresponding to the coherent layers, wherein the background layer is provided by removing the coherent layers from a key frame corresponding to the scene.

35. (Original) A system comprising:

a layer pop-up module to split a scene into one or more coherent layers;

a boundary propagation module to propagate boundaries of the coherent layers across a plurality of frames corresponding to the scene; and

a refinement module to refine the splitting to present a virtual view of the scene.

36. (Original) A system as recited in claim 35, wherein the virtual view of the scene is substantially free from aliasing.

37. (Original) A system as recited in claim 35, wherein the plurality of frames correspond to different images of the scene.

38. (Original) A system as recited in claim 35, wherein the refinement module is activated by a user.

39. (Original) A system as recited in claim 35, wherein each layer of the scene has a corresponding plane equation to represent a local geometry of that layer.

40. (Original) A system as recited in claim 35, further comprising a rendering module to render the coherent layers with a corresponding background layer to present the virtual view of the scene.

41. (Original) A system as recited in claim 35, further comprising a rendering module to render the coherent layers with a corresponding background layer to present the virtual view of the scene, wherein the background layer is provided by combining a plurality of under-segmented regions.

42. (Original) A system as recited in claim 35, further comprising a memory module to store instructions.

43. (Original) A system as recited in claim 35, further comprising one or more processing units to execute a plurality of stored instructions on one or more memory modules coupled to the processors.

44. (Previously Presented) One or more computer-storage media comprising instructions stored thereon that, when executed, direct a machine to perform acts comprising:

splitting a scene into one or more coherent layers, wherein;

each coherent layer of the scene has a corresponding plane equation to represent a local geometry of that coherent layer; and

the one or more coherent layers in combination represent a single plane of the scene;

propagating boundaries of the coherent layers across a plurality of frames corresponding to the scene, wherein the plurality of frames correspond to different images of the scene;

refining the splitting to present a virtual view of the scene, wherein the refining is;

initiated by a user;

allows the user to select at least one of the coherent layers;

allows the user to refine the corresponding plane equation of the selected coherent layer; and

allows the user to inspect and adjust the rendering quality of the selected coherent layer in real time;

rendering the coherent layers with a corresponding background layer to present the virtual view of the scene, wherein the background layer is provided by combining a plurality of under-segmented regions.

45. (Original) A computer-readable media as recited in claim 44, wherein the virtual view of the scene is substantially free from aliasing.

46. (Canceled)

47. (Canceled)

48. (Withdrawn) One or more computer-readable media having instructions stored thereon that, when executed, direct a machine to perform acts comprising:

determining a plurality of texture-mapped triangles for each layer of a scene;

binding a plurality of textures to each of the plurality of triangles;

assigning a blending ratio to each vertex of the plurality of triangles;

and blending the textures of each of the plurality of triangles to present a virtual view of the scene.

49. (Withdrawn) A computer-readable media as recited in claim 48, wherein at least three textures are bound to each of the plurality of triangles.

50. (Withdrawn) A computer-readable media as recited in claim 48, wherein the blending ratio is assigned as a primary color on each vertex.

51. (Withdrawn) A computer-readable media as recited in claim 48, wherein the blending ratio is assigned as a primary color on each vertex and the primary color is interpolated on each of the plurality of triangles.

52. (Withdrawn) A computer-readable media as recited in claim 48, wherein the virtual view of the scene is substantially free from aliasing.

53. (Withdrawn) A computer-readable media as recited in claim 48, wherein the blending utilizes a blending equation.

54. (Withdrawn) A computer-readable media as recited in claim 48, wherein the blending utilizes a blending equation stored in a pixel shader of a graphics hardware device.

55. (Original) An apparatus comprising:

means for splitting a scene into one or more coherent layers;

means for propagating boundaries of the coherent layers across a plurality of frames corresponding to the scene; and

means for refining the splitting to present a virtual view of the scene.

56. (Original) An apparatus as recited in claim 55, further comprising means for rendering the coherent layers with a corresponding background layer to present the virtual view of the scene.

57. (Original) An apparatus as recited in claim 55, further comprising means for rendering the coherent layers with a corresponding background layer to present the virtual view of the scene, wherein the background layer is provided by combining a plurality of under-segmented regions.

58. (Previously Presented) A method as recited in claim 1, wherein the scene represents a set of images.

59. (Previously Presented) A computer-readable media as recited in claim 44, wherein the scene represents a set of images.